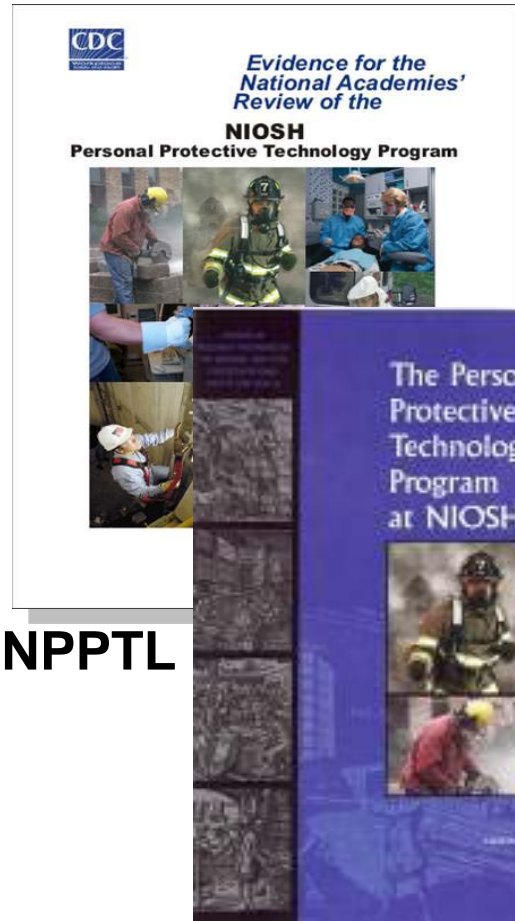


Personal Protective Technology Stakeholder Meeting

OVERVIEW

Maryann D'Alessandro, Ph.D.
Associate Director for Science, NPPTL
PPT Program Coordinator

March 29, 2011



Presentation overview



NIOSH and PPT Program background



PPT Program relevance and impact



Where are we going?

NIOSH Divisions & Laboratories



- Office of the Director, NIOSH
- Office of Extramural Programs
- Office of Mine Safety and Health
- National Personal Protective Technology Laboratory (NPPTL)

- Division of Respiratory Disease Studies (DRDS)
- Division of Safety Research (DSR)
- Health Effects Laboratory Division (HELD)
- Education and Information Division (EID)
- Division of Applied Research and Technology (DART)
- Division of Surveillance Hazard Evaluation and Field Studies (DSHEFS)
- Office of Compensation Analysis and Support (OCAS)
- Research to Practice (r2p)
- Spokane Research Laboratory

NIOSH Program Portfolio

NORA / NIOSH Industry Sectors (N=9)	NIOSH Cross Sector Programs (N=24)	
<ul style="list-style-type: none"> • Agriculture, forestry, and fishing • Healthcare and social assistance • Mining • Public Safety • Construction • Manufacturing • Services • Transportation, warehousing, and utilities • Wholesale and retail trade 	<ul style="list-style-type: none"> • Personal Protective Technology (PPT) • Authoritative recommendations development • Cancer, reproductive, cardiovascular, neurological & renal diseases • Communications and information dissemination • Emergency preparedness/response • Global collaborations • Health hazard evaluation (HHE) • Hearing loss prevention • Immune, dermal and infectious diseases • Musculoskeletal disorders 	<ul style="list-style-type: none"> • Radiation dose deconstruction • Respiratory diseases • Training grants • Traumatic injury • Work organization and stress-related disorders • Economics • Exposure assessment • Engineering controls • Work life initiative • Occupational health disparities • Small business assistance and outreach • Surveillance • Nanotechnology • Prevention through design

NIOSH PPT / NPPTL

Vision & Mission

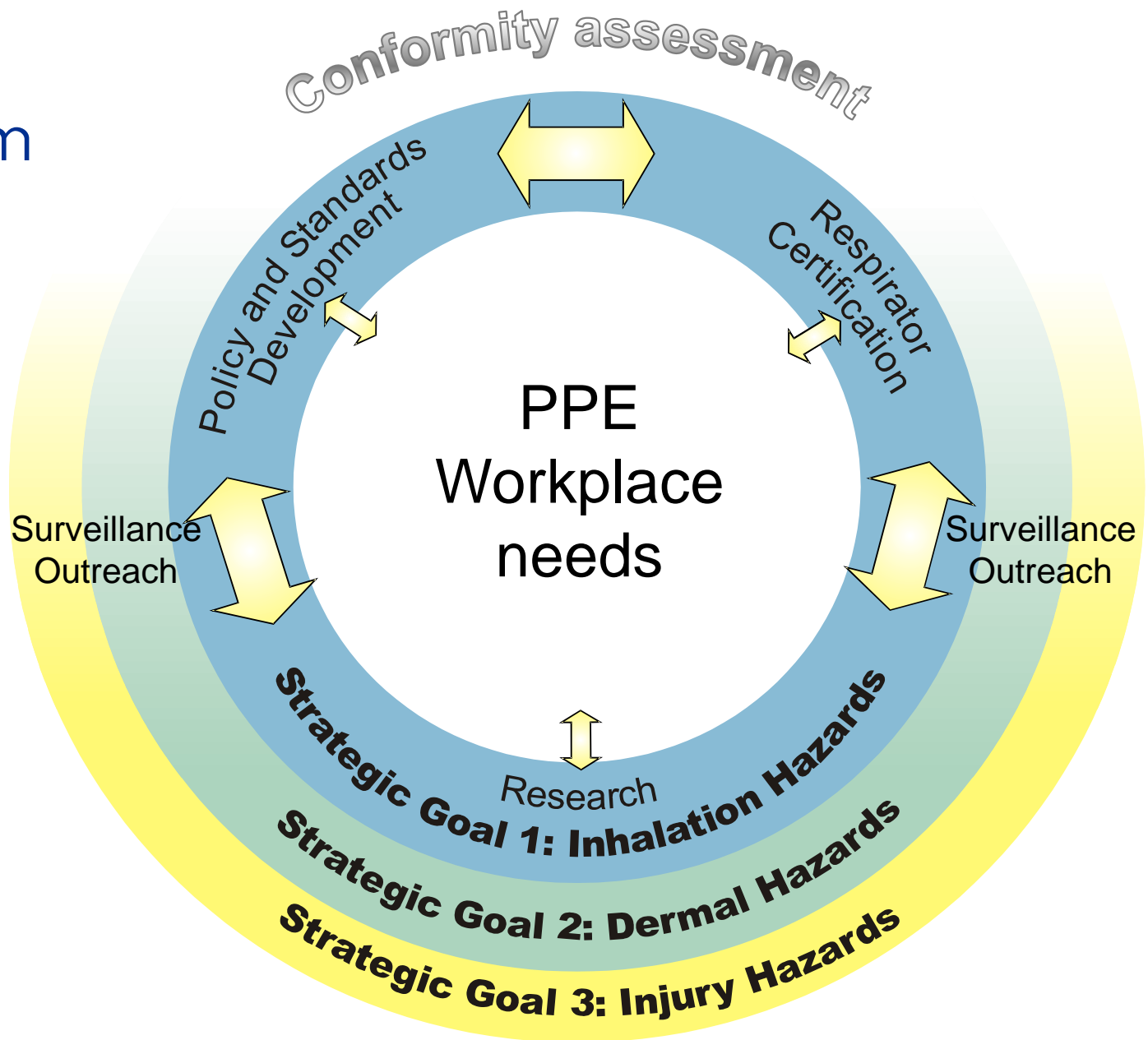
The **VISION** is to be the leading provider of quality, relevant, and timely PPT research, training, and evaluation.

The **MISSION** of the PPT program is to prevent work-related injury, illness and death by advancing the state of knowledge and application of personal protective technologies (PPT).

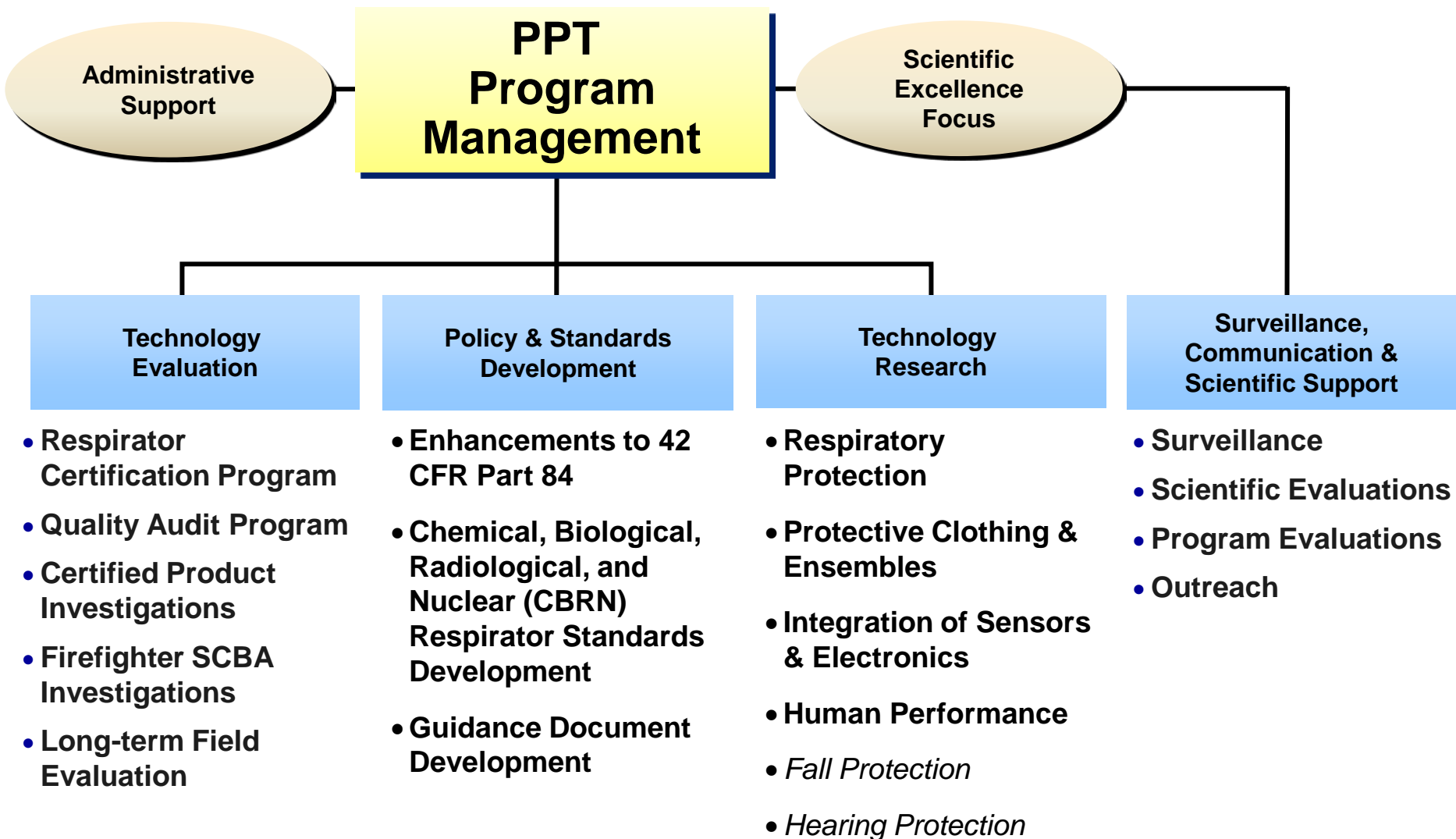


An estimated 20 million workers use PPE on a regular basis to protect themselves from job hazards.

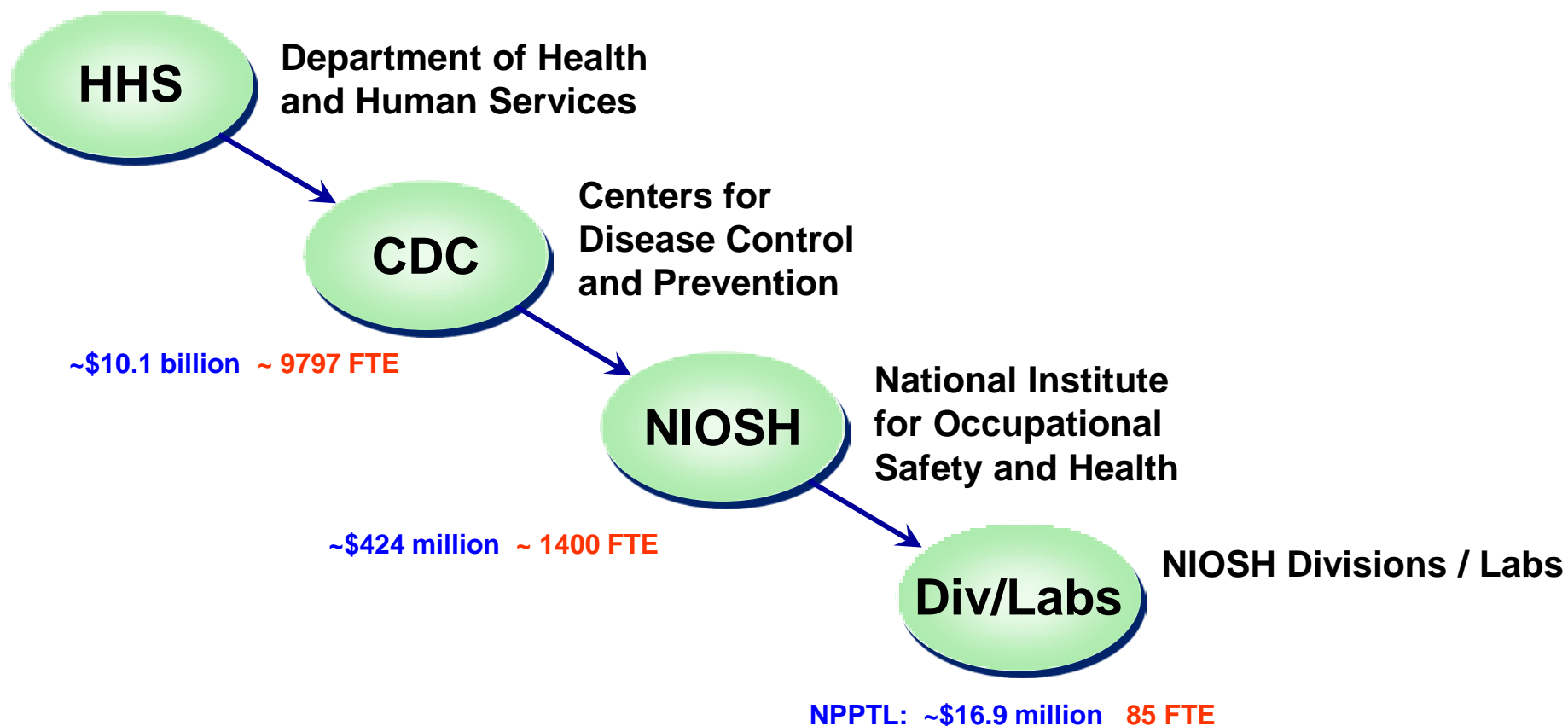
PPT Program Goals



NPPTL & PPT Program Activities



Today we have 85 people and a
\$16.9 million budget



PPT Program activities focus on workplace relevance and Impact



CBRN Protection

- Respirator Standards Development
- CBRN PPT Research
- Respirator Certification
- NFPA/IAFF Collaboration
- TSWG IAA
- OSHA Collaboration

Mine Escape Strategies

- Respirator Certification
- Respirator Investigations
- New Technology Research
- Escape Respirator Research
- Escape Respirator Standards
- MSHA Collaboration



Nanotechnology Hazards

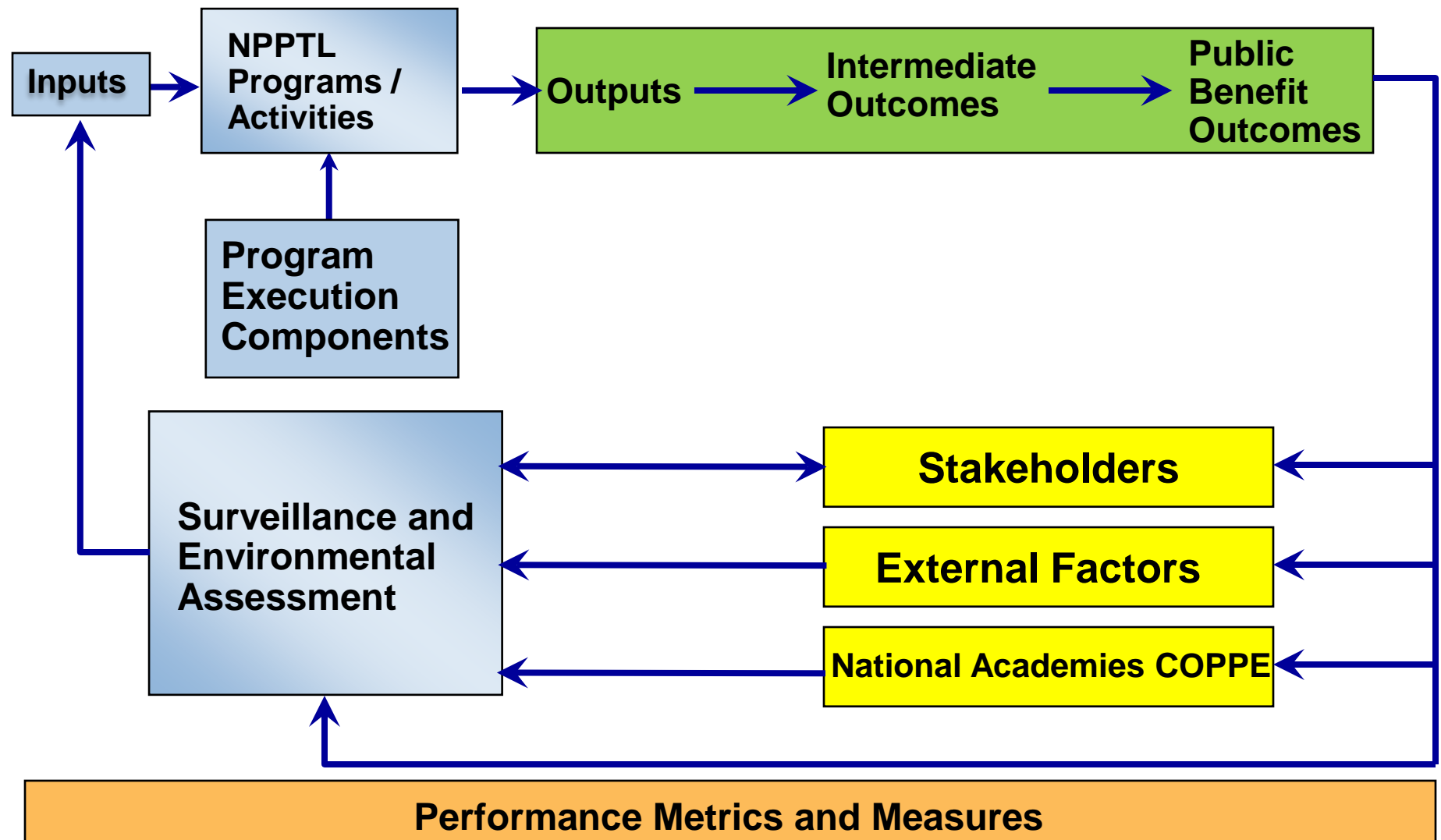
- Filtration Research
- Protective Clothing Research
- Respirator Research
- Respirator Certification
- Workplace Guidance

Pandemic Preparedness

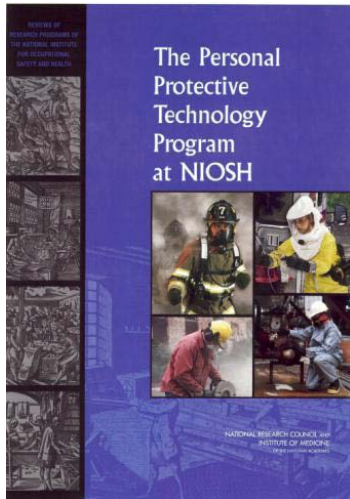
- N95 Respirator Research
- Standards (Total Inward Leakage)
- Respirator Certification
- FDA Collaboration
- National Academies Activities
- Pandemic Planning and Response



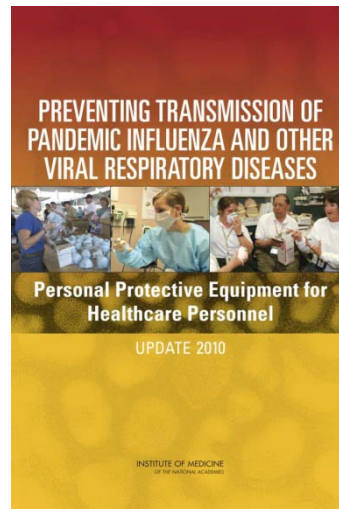
PPT Program and NPPTL Logic Model (Operating Philosophy)



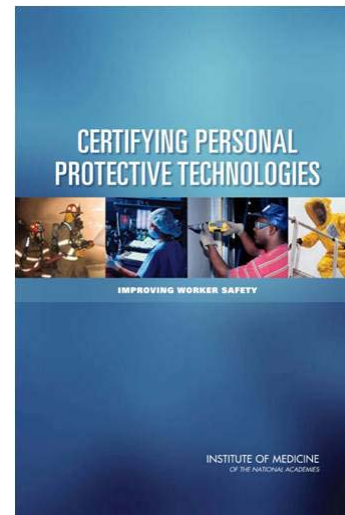
National Academies Evaluations provide high level scientific input to PPT Program



- **IOM Committee on PPE (COPPE) Established in 2005**



- **Forum for discussing scientific and technical PPE/PPT issues**



- **7 Reports**
- **1 committee in process**

National Academies Evaluations provide high level scientific input to PPT Program

- **PPT Program Evaluation Committee Report**

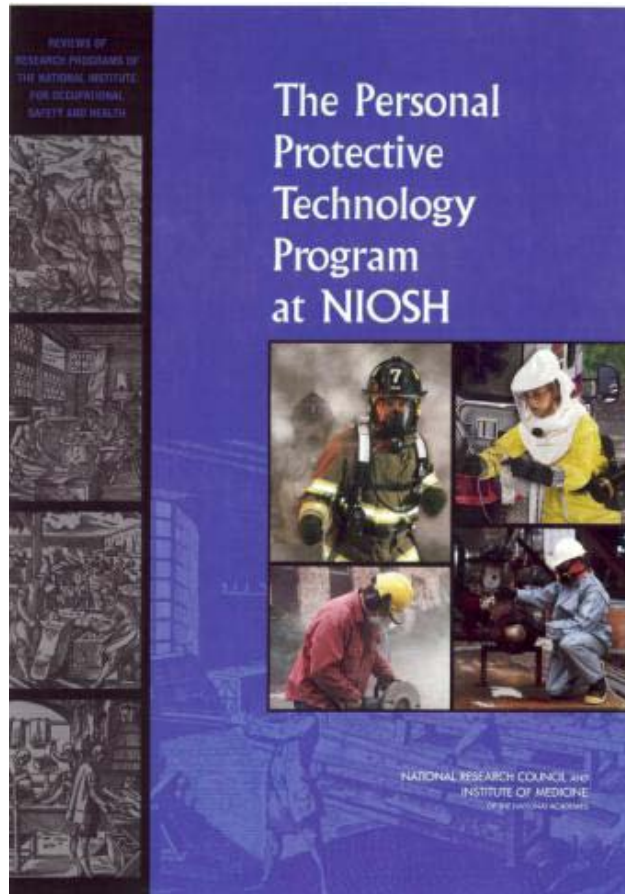
- The Personal Protective Technology Program at NIOSH (2008)

- **COPPE Spin-off Committees**

- Preventing Transmission of Pandemic Influenza and Other Viral Respiratory Diseases (2011)
- Certifying Personal Protective Technologies: Improving Worker Safety (2011)
- Preparing for an Influenza Pandemic: PPE for Healthcare Workers (2008)
- Measuring Respirator Use in the Workplace, (2006)
- Assessment of the NIOSH Head-and-Face Anthropometrics Survey of US. Respirator Users, (2006)
- Reusability of Facemasks During an Influenza Pandemic: Facing the Flu (2006) (funded by HHS)
- Respiratory Protection Nursing Program Curriculum Content – in process

Reports available through <http://www.iom.edu/Activities/PublicHealth/PPEinWorkplace.aspx>

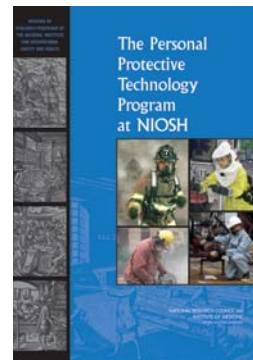
National Academy Evaluation of NIOSH PPT Program is setting stage for future activities



- **Comprehensive National PPT Program**
- **Establish PPT Research Priorities and Expand the Extramural Program**
- **Enhanced respirator certification program**
- **Research on use and usability of PPE**
- **Assess PPT use and effectiveness using a lifecycle approach**

National Academies Review of PPT Program (2008)

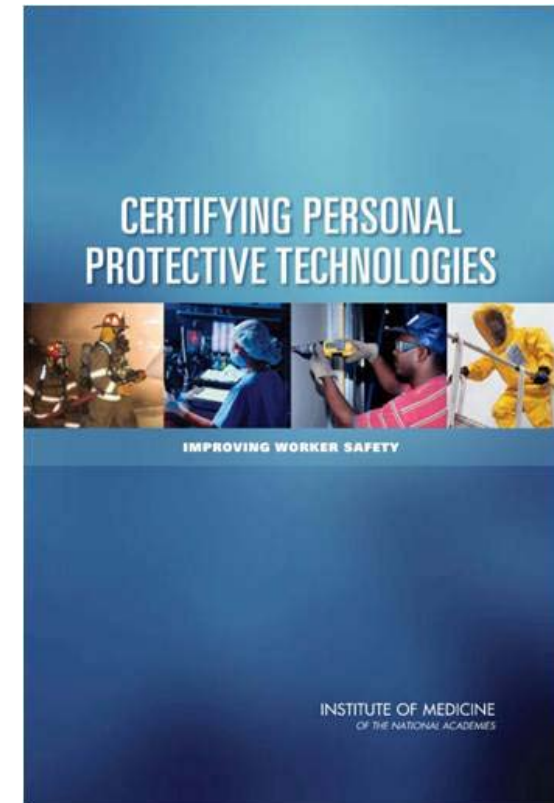
Recommendation 1: Implement and Sustain a Comprehensive National PPT Program



- **Oversee, coordinate, and where appropriate, conduct research across all types of occupational PPT and across all relevant occupations and workplaces;**
- **Participate in policy development and standards setting across all types of occupational PPT;**
- **Oversee all PPT certification in order to ensure a minimum uniform standard of protection and wearability. The National Program should collaborate with other relevant government agencies, private-sector organizations, and not-for-profit organizations to conduct an assessment of the certification mechanisms needed to ensure the efficacy of all types of PPT; and**
- **Promote the development, standards setting, and certification of effectively integrated PPT components and ensembles in which multiple types of PPT (e.g., eye protection, hearing protection, respirators) can be effectively and seamlessly worn together.**

IOM Certifying PPT Report Recommendations issued Nov 2010

- **Develop and Implement Risk-Based Conformity Assessment Processes for Non-Respirator PPT**
- **Enhance Research, Standards Development, and Communication**
- **Establish a PPT and Occupational Safety and Health Surveillance System**



What is the conformity assessment challenge?

- How can a risk based approach to conformity assessment system design be applied to PPT?
- How do standards and conformity assessment impact the selection and use of PPE?
- When is assurance beyond first party certification necessary?
- What is the federal agency role in the process?



Organizing and Operating Philosophy: “First, do no harm.”

The committee recognizes that many conformity assessment processes already in place can fit this framework.” (p. 114, IOM report)



**Provide your input to NIOSH PPT Conformity
Assessment Docket # 237
to be available May 2011 – July 2011**

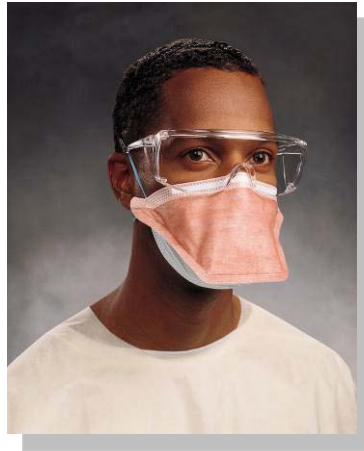
**Identify collaborators to participate in PPT Conformity
Assessment Working Group**

Why are we here today?



Innovative approaches to collaboration are needed

Quality Partnerships Enhance Worker Safety & Health



Visit Us at: <http://www.cdc.gov/niosh/npptl/>

Disclaimer:

The findings and conclusions in this presentation have not been formally disseminated by the National Institute for Occupational Safety and Health and should not be construed to represent any agency determination or policy.

Thank you